Remarks

The instant Office Action dated November 20, 2007 indicated the following rejections: claims 1-6 and 9-12 stand rejected under 35 U.S.C. 102(b) over Chen (U.S. Patent No. 6,130,129), and that claims 7-8 stand rejected under 35 U.S.C. 103(a) over Chen. Applicant traverses each of these rejections for the reasons discussed below.

Applicant respectfully traverses the Section 102(b) rejection of claims 1-6 and 9-12 because the cited portions of the Chen reference do not correspond to the claimed invention which includes, for example aspects directed to first forming isolation zones in the substrate and thereafter forming a floating gate on the substrate between two of the isolation zones. The cited portions of the Chen reference teach that poly-1 layer 12 (which ultimately forms the main part of the floating gate) is formed on substrate 1 as part of stacked multilayer 10, that multilayer 10 and substrate 1 are subsequently etched to form towering structure 20 and recess/trench 21, and that field oxide layer 22 is then deposited in recess 21. *See, e.g.,* Figures 1-4 and Col. 5:20-47. Thus, Chen teaches forming the floating gate and then forming isolation zone 22 in substrate 1, instead of first forming the isolation zones and subsequently forming the floating gate as required by the claim limitations.

Moreover, the Examiner erroneously asserts that Chen's floating gate 25 corresponds to the floating gate of the claimed invention. The claimed floating gate is extended using conductive spacers, whereas Chen's floating gate 25 includes sidewall spacers 24. *See, e.g.,* Figure 7 and Col. 5:60-67. Chen teaches extending poly-1 layer 12 with spacers 24 to form floating gate 25. Thus, Chen's floating gate 25 does not correspond to the claimed floating gate because Chen does not extend floating gate 25 with sidewall spacers.

In view of the above, the Section 102(b) rejection of claims 1-6 and 9-12 is improper and Applicant requests that it be withdrawn.

In the Office Action Amendment and Response dated August 29, 2007 Applicant presented several arguments regarding the lack of correspondence between the cited portions of the Chen reference and claims 2-3 to which the Examiner failed to respond as required. *See, e.g.,* M.P.E.P. § 707.07(f) ("the examiner should, if he or she repeats the rejection, take note of the applicant's argument and answer the substance of it"). Applicant submits that the lack of correspondence between Chen and the dependent claims further highlights that

Chen does not teach first forming isolation zones in the substrate and thereafter forming a floating gate on the substrate between two of the isolation zones as in the claimed invention.

Applicant further traverses the Section 102(b) rejection of claim 2 because the cited portions of Chen do not correspond to aspects of the claimed invention directed to forming recesses in the isolation zones under the opposite walls of the floating gate. The Examiner erroneously cites to Chen's recess 21 and oxide layer 22 as allegedly corresponding to the claimed recesses and isolation zones respectively. However, Chen teaches that recess 21 is etched in multilayer 10 and substrate 1, and then oxide layer 22 is deposited in recess 21. *See, e.g.,* Figures 1-4 and Col. 5:20-47. Thus, the Examiner's assertion of correspondence is illogical, in that the claim 2 requires that the recesses be formed in the isolation zones. Accordingly, the Section 102(b) rejection of claim 2 is improper and Applicant requests that it be withdrawn.

Applicant further traverses the Section 102(b) rejection of claim 3 because the cited portions of Chen do not correspond to aspects of the claimed invention directed to depositing a floating gate layer after forming isolation zones in the substrate. The Examiner erroneously cites to Chen's poly-1 layer 12 as allegedly corresponding to the claimed floating gate layer. However, as discussed above, Chen teaches that poly-1 layer 12 is formed on substrate 1 as part of stacked multilayer 10 which is subsequently etched to form towering structure 20 and recess/trench 21, and then field oxide layer 22 is deposited in recess 21. *See, e.g.,* Figures 1-4 and Col. 5:20-47. Thus, Chen teaches depositing poly-1 layer 12 and then forming isolation zone 22, instead of first forming the isolation zones and then depositing the floating gate layer as in the claimed invention. Therefore, the Section 102(b) rejection of claim 3 is improper and Applicant requests that it be withdrawn.

Applicant respectfully traverses the Section 103(a) rejection of claims 7 and 8 because the Examiner has provided no evidence of motivation to modify the Chen reference. This approach is contrary to the requirements of Section 103 and relevant law. *See, e.g., KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (U.S. 2007) ("A patent composed of several elements is not proved obvious merely by demonstrating that each element was, independently, known in the prior art."). The Examiner continues to assert that one of skill in the art would modify Chen to use STI or LOCUS as different means of isolation simply based on a further assertion that these isolation techniques are well known.

However, the recent Supreme Court decision supports the long-standing law that the mere existence of elements in the prior art is not sufficient for a Section 103(a) rejection:

> "Although common sense directs one to look with care at a patent application that claims as innovation the combination of two known devices according to their established functions, it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does. This is so because inventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known." *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (U.S. 2007).

In this instance, the Examiner simply asserts that STI and LOCUS isolation techniques are known without providing any evidence as to why one of skill in the art would modify Chen to use these isolation techniques. Applicant submits that the Examiner appears to be improperly resorting to hindsight reconstruction based upon Applicant's disclosure in an attempt to arrive at a combination that corresponds to the claimed invention. *See, e.g.,* M.P.E.P. § 2142.

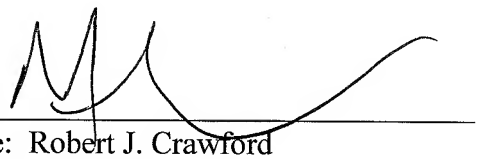
In view of the above, the Examiner has failed to provide the requisite motivation as to why one of skill in the art would modify the Chen reference as required. *See, e.g., KSR Int'l Co. v. Teleflex Inc.* discussed above. Accordingly, the Section 103(a) rejection of claims 7 and 8 is improper and Applicant requests that it be withdrawn. Moreover, the Section 103(a) rejection of claims 7 and 8 is improper because the cited portions of the Chen reference do not correspond to the claimed invention as discussed above in relation to the Section 102(b) rejection of claim 1.

In view of the remarks above, Applicant believes that each of the rejections has been overcome and the application is in condition for allowance. Should there be any remaining issues that could be readily addressed over the telephone, the Examiner is asked to contact the agent overseeing the application file, Peter Zawilski, of NXP Corporation at (408) 474-9063 (or the undersigned).

Please direct all correspondence to:

Corporate Patent Counsel
NXP Intellectual Property & Standards
1109 McKay Drive; Mail Stop SJ41
San Jose, CA 95131

CUSTOMER NO. 65913

By: 
Name: Robert J. Crawford
Reg. No.: 32,122
651-686-6633
(NXPS.298PA)